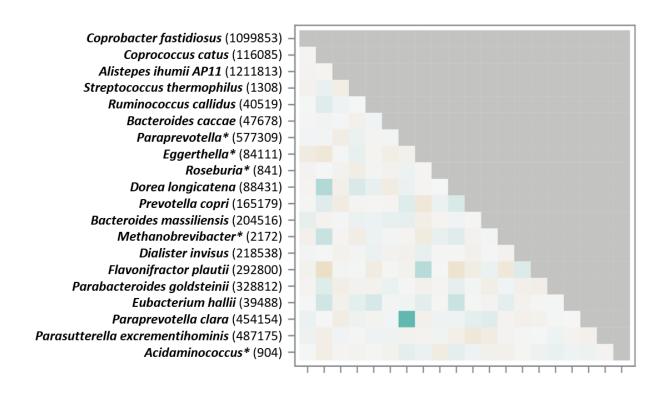


Streptococcus salivarius (1304)

Streptococcus parasanguinis (1318)

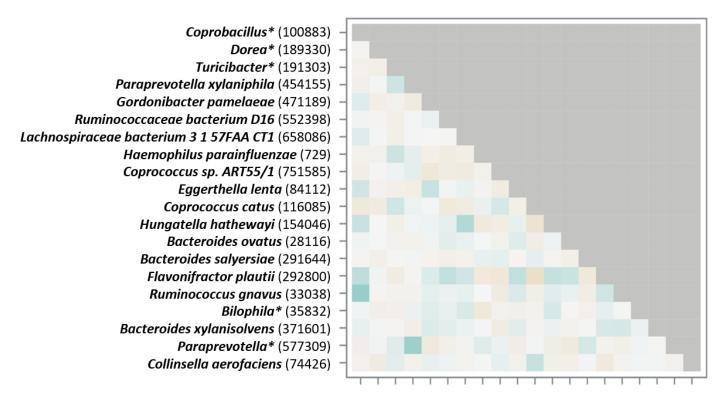
Methanobrevibacter* (2172) Bacteroides eggerthii (28111) Bacteroides dorei (357276) Paraprevotella clara (454154) Ruminococcus sp. 5 1 39BFAA (457412) Lachnospiraceae bacterium 3 1 46FAA (665950) Clostridium symbiosum (1512) Veillonella* (29465) Blautia hydrogenotrophica (53443) Paraprevotella* (577309) Eggerthella* (84111) Hungatella hathewayi (154046) Flavonifractor plautii (292800) Veillonella parvula (29466) Acidaminococcus* (904) **Eubacterium eligens** (39485) **Adlercreutzia equolifaciens** (446660) Coprococcus sp. ART55/1 (751585)



Coprococcus catus (116085)
Coprobacter fastidiosus (1099853)

Acidaminococcus* (904) Parasutterella excrementihominis (487175)

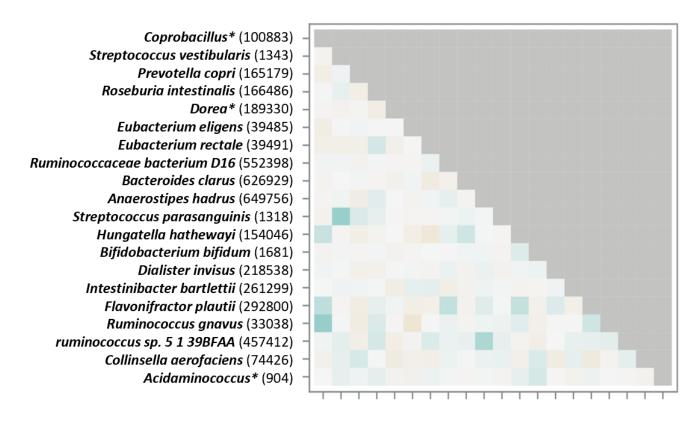
Bacteroides caccae (47678) Roseburia* (841) Parabacteroides goldsteinii (328812) **Alistepes ihumii AP11** (1211813) Streptococcus thermophilus (1308) Ruminococcus callidus (40519) Eggerthella* (84111) Dorea longicatena (88431) **Bacteroides massiliensis** (204516) Methanobrevibacter* (2172) Dialister invisus (218538) Flavonifractor plautii (292800) Eubacterium hallii (39488) Paraprevotella clara (454154) Paraprevotella* (577309) Prevotella copri (165179)



Coprobacillus* (100883)

Dorea* (189330)

Paraprevotella* (577309) Paraprevotella xylaniphila (454155) Coprococcus sp. ART55/1 (751585) Eggerthella lenta (84112) Bacteroides ovatus (28116) Bacteroides salyersiae (291644) Flavonifractor plautii (292800) Ruminococcus gnavus (33038) Bilophila* (35832) Bacteroides xylanisolvens (371601) Collinsella aerofaciens (74426) Turicibacter* (191303) Gordonibacter pamelaeae (471189) Ruminococcaceae bacterium D16 (552398) Lachnospiraceae bacterium **3 1 57FAA CT1** (658086) Haemophilus parainfluenzae (729) Coprococcus catus (116085) Hungatella hathewayi (154046)

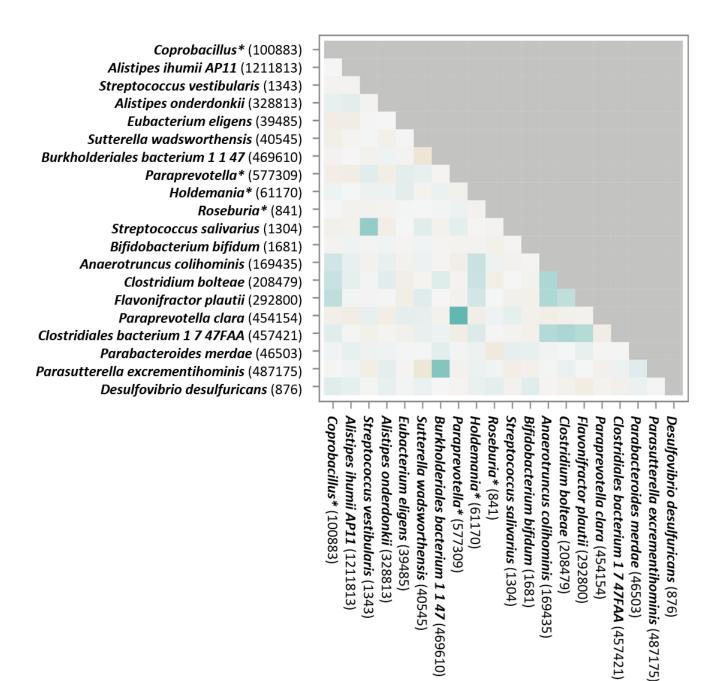


Coprobacillus* (100883)

Streptococcus vestibularis (1343)

Collinsella aerofaciens (74426) Acidaminococcus* (904)

Streptococcus parasanguinis (1318) Bacteroides clarus (626929) Anaerostipes hadrus (649756) Hungatella hathewayi (154046) Bifidobacterium bifidum (1681) Ruminococcus gnavus (33038) Ruminococcus sp. 5 1 39BFAA (457412) Prevotella copri (165179) **Roseburia intestinalis** (166486) *Dorea** (189330) **Eubacterium eligens** (39485) Eubacterium rectale (39491) Ruminococcaceae bacterium **D16** (552398) Dialister invisus (218538) Flavonifractor plautii (292800) Intestinibacter bartlettii (261299)



Supplemental Figure 1: Correlation between the relative abundance of species comprising each Subclass-specific Microbiome Profile.

- 2a) Correlation matrix of species comprising the Flavonol Microbiome Fingerprint Score.
- 2b) Correlation matrix of species comprising the Flavanol Monomer Microbiome Fingerprint Score.
- **2c**) Correlation matrix of species comprising the Flavanol Polymer Microbiome Fingerprint Score.
- 2d) Correlation matrix of species comprising the Flavanone Microbiome Fingerprint Score.
- 2e) Correlation matrix of species comprising the Flavone Microbiome Fingerprint Score.
- **2f**) Correlation matrix of species comprising the Anthocyanidin Microbiome Fingerprint Score n=247.

NCBI taxonomy identification numbers presented in parenthesis.



Legend: Spearman Rank correlation coefficient